

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-023103**Date Inspected:** 06-Apr-2011**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Gang Wei**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG**Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance(QA) Inspector Mr.Shrikant Utekar was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. The QA Inspector observed and/or found the following:

BAY # 14

This QA Inspector randomly observed the following work in progress.

OBG 14EAST

SHIELDED METAL ARC WELDING PROCESS.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 067571 performing the Shielded Metal Arc Welding process on weld 128 located at PCMK SEG3019AW. ZPMC QC Mr. Zhu Yuan Yuan was monitoring this welding operation. The welding variables recorded by QC appeared to comply with WPS-B-P-2214-Tc-u4b-Fcm-1.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 501946 performing the Shielded Metal Arc Welding process on weld 058 located at PCMK SEG3019Y. ZPMC QC Mr. Zhu Yuan Yuan was monitoring this welding operation. The welding variables recorded by QC appeared to comply with

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WPS-B-P-2212-B-u2-Fcm-1.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 054013 performing the Shielded Metal Arc Welding process on weld 003 located at PCMK SEG3019AB. ZPMC QC Mr. Zhu Yuan Yuan was monitoring this welding operation. The welding variables recorded by QC appeared to comply with WPS-B-P-2214-B-u2-Fcm-1.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 043661 performing the Shielded Metal Arc Welding process on weld 004 located at PCMK SEG3019M. ZPMC QC Mr. Zhu Yuan Yuan was monitoring this welding operation. The welding variables recorded by QC appeared to comply with WPS-B-P-2214-B-u3b-Fcm.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 044779 performing the Shielded Metal Arc Welding process on weld 002 located at PCMK SEG3019AB. ZPMC QC Mr. Zhu Yuan Yuan was monitoring this welding operation. The welding variables recorded by QC appeared to comply with WPS-B-P-2212-B-u2-Fcm-1.

WELD REPAIR

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 037723 performing the Shielded Metal Arc Welding process on weld 023 located at PCMK SEG3019BB. ZPMC QC Mr. Zhu Yuan Yuan was monitoring this welding operation. The welding variables recorded by QC appeared to comply with WPS-345-SMAW-4G (4F)-Fcm-Repair-1. Weld repair report identified as B-WR20589.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 068764 performing the Shielded Metal Arc Welding process on weld 025 located at PCMK SEG3019AQ. ZPMC QC Mr. Zhu Yuan Yuan was monitoring this welding operation. The welding variables recorded by QC appeared to comply with WPS-345-SMAW-4G (4F)-Fcm-Repair-1. Weld repair report identified as B-WR20559.

FLUX CORED ARC WELDING PROCESS.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 051356 performing the Flux Cored Arc Welding process on weld 148 located at PCMK SEG3019AJ. ZPMC QC Mr. Zhu Yuan Yuan was monitoring this welding operation. The welding variables recorded by QC appeared to comply with WPS-B-T-2232-ESAB.

HEAT STRAIGHTENING

This Quality Assurance (QA) Inspector observed ZPMC personnel performing heat straightening, member identified as deck plates (DP3161, DP3167 and DP3160). Distortion appeared to be caused by welding. ZPMC Quality Control (QC) inspector identified as Mr. Zhu Yuan Yuan was present to monitor the heat straightening process. The heat straightening appeared to comply with heat straightening Report HSR1 (B)-0464.

INCIDENT

During the Quality Assurance (QA) random in-process observations of the fabrication of OBG segment 14East in

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bay # 14, this Caltrans QA Inspector observed the additional cope hole approximately radius (R40) is to be made on X4537A (see attached photo). As per drawing, cope hole is to be provided as shown in detail 531S (of Drawing: SD531) on X4537A of Floor Beam (FB3260). X4537 is designated as Seismic Performance Critical Material (SPCM). Incident report was issued. See attached photographs for additional detail.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.



Summary of Conversations:

No significant conversations were reported on this date.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang, +(86) 1500 042 2372, who represents the Office of Structural Materials for your project.

Inspected By: Utekar,Shrikant

Quality Assurance Inspector

Reviewed By: Peterson,Art

QA Reviewer